

Faith and Philosophy: Journal of the Society of Christian Philosophers

Volume 23 | Issue 3

Article 9

7-1-2006

Padgett, SCIENCE AND THE STUDY OF GOD: A MUTUALITY MODEL FOR THEOLOGY AND SCIENCE and Saunders, DIVINE ACTION AND MODERN SCIENCE

Patrick Richmond

Follow this and additional works at: <https://place.asburyseminary.edu/faithandphilosophy>

Recommended Citation

Richmond, Patrick (2006) "Padgett, SCIENCE AND THE STUDY OF GOD: A MUTUALITY MODEL FOR THEOLOGY AND SCIENCE and Saunders, DIVINE ACTION AND MODERN SCIENCE," *Faith and Philosophy: Journal of the Society of Christian Philosophers*: Vol. 23 : Iss. 3 , Article 9.
Available at: <https://place.asburyseminary.edu/faithandphilosophy/vol23/iss3/9>

This Book Review is brought to you for free and open access by the Journals at ePLACE: preserving, learning, and creative exchange. It has been accepted for inclusion in Faith and Philosophy: Journal of the Society of Christian Philosophers by an authorized editor of ePLACE: preserving, learning, and creative exchange.

sible that there exists a being morally better than it. (91) But the consequent entails that the omniscient being is not essentially perfectly good. And Rowe contends that the principle expresses a necessary truth. These modifications facilitate presentation of Rowe's argument.

2. Well, strictly he would have to give up $(OA \supset A)$ or $(A \supset \Diamond A)$. But it is hard to imagine anyone contending that some actual states of affairs are also impossible.

Science and the Study of God: A Mutuality Model for Theology and Science, by Alan G. Padgett. Grand Rapids: Eerdmans, 2003. Pp. 224. \$22.00 (paper). *Divine Action and Modern Science*, by Nicholas Saunders. Cambridge University Press, 2002. Pp. 234. \$22.00 (paper).

PATRICK RICHMOND, St Catharine's College, Cambridge, UK

These two books deal with the relation of science to theology, one concentrating more on broad outlines and methodology, the other on a specific topic. Both take Christian faith as a given, at least provisionally, and both note that Christian faith sees science as investigating God's creation, so science and theology are both concerned with understanding the same cosmos.

Proceeding from this basic perspective, Padgett develops a collegial metaphor of mutuality, sketching what he terms "dialectical realism" between science and theology. Science and theology should both inform and be informed by our worldview, our basic framework for life that helps us understand the world and motivates our practice as well. Our worldview can affect the way we interpret the data and conclusions of academic disciplines. This "mutuality model" sees science and theology as more intimately related than mere dialogue partners but as still distinct and not fully integrated academic disciplines.

Padgett points out that many claims that science and religion are incompatible incorrectly assume that science is a worldview or that it presupposes a naturalistic worldview. In fact, science arose from a Christian intellectual environment: even Galileo was not antireligious.

Padgett argues for the existence of various levels of explanation, with disciplines like history using explanations that presuppose those used in the social and physical sciences. Theology likewise includes explanatory claims, such as that God somehow explains the existence of the cosmos. He argues that in the right circumstances one's worldview, including religious commitments, can rationally help one choose among various theories that are equally supported by the data and standards of other disciplines. Although the truth must be sought in each science according to the traditions of enquiry of that discipline, results in one field may be called into question by those in another if they do not cohere, as indeed happens amongst the sciences from time to time.

Next, Padgett argues for "dialectical realism." We learn in a community with a history and tradition. As with many post-modern approaches, there is a suspicion of grand systems and an attention to the particular and exceptional. Padgett also argues for critical realism in both theology and science.

The subject of both is held to exist independently of the investigator's experience of them. This is the viewpoint of almost all religious believers and Padgett defends it against the claims of Heidegger and others. Theological language is metaphorical and analogical and its theories should be modest, dialectical and open to revision, but theology is not impossible.

In the third chapter Padgett argues that there is no neutral, value free study of religion. He complains that many authors of recent works on the historical Jesus have attempted to write histories about Jesus rejecting religious faith while being blind to their own metaphysical presuppositions. Even when they recognize the role of presuppositions, many authors attempt to be scientific or objective and then ignore them again, or appeal to scholarly consensus of some sort, even though there is little consensus. However, Padgett does seem to think that there is some sort of academic consensus about the methods of academic history, and that it appeals to psychosocial explanations, not theological ones. If the resurrection did take place it is beyond historical explanation. It would seem to follow that academic history is unable to account for some past events. Christian historians cannot base their faith on the probable arguments of history, but they can seek historical, public evidence for their beliefs. Faith must therefore be open to revision in the light of evidence and argument. Padgett appeals to Basil Mitchell's view that fideism is unsatisfactory and that there is a proper place for reflection and revision in the life of faith. If all the best historical evidence were against the resurrection then this would require a serious reinterpretation of Christian faith, though perhaps not total abandonment of it.

Next, Padgett argues that the natural sciences are not purely objective and are properly influenced by worldviews, not least by ethical norms controlling what is done. Theology has different methods to science, making use of spiritual insight, revelation, religious traditions and communal worship, but it does seek truth. Padgett argues that methodological naturalism too easily becomes metaphysical naturalism. However, there is a long tradition of natural philosophy that confined its attention to secondary as opposed to primary causes. He proposes that *science is the rigorous and empirical investigation of secondary causes*. This seems questionable, since angels, for example, are secondary causes but would not normally be considered appropriate matter for scientific study. Padgett suggests that materialists could consider the primary cause to be the universe or the laws of nature, but this seems to suggest that either science doesn't study the universe or the laws of nature or that they are both primary and secondary causes. In response to Del Ratzsch's claims that science has no clear definition and that it should pursue the truth rather than exclude plausible explanations on the basis of artificial disciplinary divisions, Padgett responds that there are well-defined traditions of inquiry in which scientists are trained and, although scientists should pursue truth as they see it, this may lead them beyond their own academic expertise and tradition of inquiry. The mutuality model involves real distinctions among academic disciplines but not strict separation.

Padgett rejects rationalism in Christian theology; it should look to scripture and traditional norms before it looks to reason, philosophy and science. Contra process theology, Whitehead's metaphysical system cannot

demand primacy. All philosophical systems so far have proved inadequate, our access to reality is limited and absolute systems tend to be imposed on others. The Christian theologian should draw piecemeal on philosophical notions, as best suits the goal of advancing Gospel truth. Though there is diversity in scripture, Christ provides the center of a consonant tradition and a responsible hermeneutic can guide and shape the community of faith. It may not be possible to provide compelling arguments for the scriptural tradition, but natural theology has similar limitations.

Theology ought to be a form of worship, addressing God, the people of God and finally all people interested in Christianity. In contrast with mere religious studies and sociology, theology is interested in the truth about ultimate reality, not just in people's beliefs about it, and arises from love for God. This is compatible with the pursuit of truth, free from ideological or political interference, but the Enlightenment myth of value-free, universal rationality must be rejected, having failed on its own terms. As argued in an appendix, Padgett believes there are no universal standards of good informal argument but there are "family resemblances" amongst various traditions of inquiry. Christian theology can be an academic discipline because it seeks to pursue truth in a rational, rigorous manner, but its notions of rationality ought not to be dictated from the outside.

Padgett then offers some case studies where scientific and theological beliefs may mutually interact. Chapter seven looks at time, arguing that theological beliefs about the importance of history can inform the interpretation of modern physics. Irreversible processes, such as the increase of entropy, should be seen as ontologically fundamental. The Christian doctrine of creation does not require that the universe began in time, but thermodynamics suggests that the universe will end. Padgett argues briefly that this implies that physical time has a beginning, since otherwise we should already have reached the end. However, he seems to move too quickly from the universe having a finite future to it having a finite duration overall. Those familiar with debates about the Kalam cosmological argument will be unsatisfied, but Padgett merely concludes that science supports the contingency of the universe, which even those unpersuaded by his arguments may agree with.

Chapter eight argues that history can influence Christology. It steers between Barth's reliance on revelation alone and Pannenberg's attempt to base faith on history. Belief in the incarnation demands historical study without being determined by it. Some doctrines go beyond the results of critical history, though they remain sensitive to it. Interestingly, Padgett thinks that historical evidence favors an orthodox understanding of the incarnation over Ebionitism, in which Jesus is a mere man, but not Arianism, in which he is a pre-existent creature. Part of his case is that the early followers of Jesus worshipped him, although they were monotheists, but this seems a problem for Arianism as well as Ebionitism.

This is a complex book full of eclectic scholarship. The image of an overarching worldview informed by and informing dialectic amongst distinct academic disciplines seems helpful, and, if it leaves it unclear exactly what properly belongs to each discipline, then this unclarity at least models reality. The main weakness of the book is its lack of attention to specific difficulties. In his conclusion Padgett explains that he thought it more impor-

tant to offer a broad outline of how we should approach the relationship of science and religion than to tackle the emotion-laden topic of evolution. However, the book contains too little discussion of questions of incompatibility between scriptural and scientific accounts to make it clear how one should proceed on this problematic topic, or others. Padgett's case study of thermodynamics deals with a highly abstract doctrine of creation, rather than the Biblical text, and his studies of resurrection and incarnation are atypical, in that the scriptural text is also the primary historical data. It might have been more useful to doubters inside and outside the community of faith to pay more attention to disagreements and antitheses in the dialectic. In this regard the second book provides an interesting contrast.

Like Padgett, Nicholas Saunders believes that science and theology should mutually inform each other, but his focus is far less constructive.

Saunders offers a wide-ranging, scientifically astute, largely negative review of recent attempts to understand divine action in the light of modern science. He begins by noting how contemporary and biblical Christian practice suggests that God can control such things as the casting of lots (though concrete examples rarely figure later in the book). Ancient Near Eastern understandings of nature were far more personalized than modern ones, natural events being seen as the results of divine activity rather than autonomous causes. Today, theologians are thus faced with the question of how very different concepts of nature can be fused in an intellectually defensible account.

Special divine action (SDA), God's producing particular events, might be subsumed into the general act of creating and sustaining the universe, as in the theologies of Maurice Wiles and Gordon Kaufman. Saunders argues that such accounts are untraditional and not generally compelling. Alternatively, all natural events might be seen as in some sense SDA. Saunders criticizes this approach for granting insufficient autonomy to the natural world. It raises problems for theodicy and for distinguishing significant divine actions from others. Austin Farrar's claim that God's action is hidden beyond human investigation is rejected as pessimistic and obscurantist. Accounts of the world as God's body are deemed unhelpful and God's affecting mental processes does not avoid the problem of his interaction with physical systems, because the brain is involved. Saunders then distinguishes compatibilist SDA, which does not require God to initiate specific causal sequences which otherwise would not exist and which is compatible with physical determinism, from incompatibilist SDA, where God originates novel causal chains incompatible with physical determinism. Compatibilist accounts threaten to leave God unresponsive or impotent, but incompatibilist accounts seem to require some sort of miraculous intervention or causal openness in the laws of nature. Many are wary of miraculous intervention, believing it suggests that God is somehow inconsistent or unfaithful to creation by acting against nature. Saunders discusses the concepts of laws of nature and determinism and concludes that the concept of intervention or violation only makes sense given a necessitarian account of the laws of nature, where laws are based on natural necessities. He claims that the other (regularitarian, instrumentalist, and irreducibly stochastic) accounts of laws of nature leave no scope for violations. If the laws describe events, as in a regularitarian account,

then they must be adjusted to cover unusual events, leaving no room for violation and making scientific prediction harder.

Saunders adopts William James's account of determinism in which "those parts of the universe already laid down absolutely appoint and decree what the other parts shall be" (p. 85). This ontological notion is distinguished from the epistemological one of predictability. Having outlined the conceptual landscape, Saunders then reviews attempts to combine quantum theory and chaos theory with divine action. The classic of this kind is William Pollard's *Chance and Providence* (London: Faber and Faber, 1958), and contemporary theologians such as Robert Russell, Nancey Murphy, and Thomas Tracy have also offered accounts of divine action utilizing quantum mechanics (e.g., the essays collected in *Quantum Mechanics: Scientific Perspectives on Divine Action*, ed. Robert John Russell, Philip Clayton, Kirk Wegter-McNelly, John Polkinghorne [Vatican Observatory Publications and Center for Theology and the Natural Sciences, 2001]).

Saunders argues that such theories require a disputable, indeterministic interpretation of measurement events. Though he does not make this clear, proponents of quantum SDA usually concur, claiming that God can determine the outcome of these measurement events. Saunders characterizes this as "the assertion that God simply 'ignores' the probabilities predicted by the orthodox measurement theory and controls the outcomes of particular measurements" (p. 154). Saunders complains that if God were thus to determine quantum events, then the probability patterns arising from quantum theory "either are a deception in that they have no relationship with physical reality whatsoever, or they are a representation of the chance of God acting in the same way on a subsequent occasion." (p. 155).

Saunders sees the spectre of occasionalism lurking here and further argues that if we treat quantum-measurement probabilities as reflecting regularities in divine action, this commits us to a neo-Humean, "regularitarian" conception of natural laws. Saunders has argued that such an account leaves no scope for violation, and therefore the very distinction between interventionist and non-interventionist divine action collapses. Though Saunders does not say this, it would seem he should hold that *any* indeterministic law of nature leaves no scope for non-interventionistic SDA, for similar arguments would apply. However, his arguments seem inconclusive.

First, God need not *ignore* the probabilities predicted by measurement theory; God could determine the outcome of specific measurement events *with reference* to the overall frequencies predicted by orthodox measurement theories. The claim that God ultimately determines the outcome of measurement events certainly raises questions about the autonomy of natural causes, but Scripture itself poses such questions. God's determinations need not be understood in an occasionalistic fashion, but could take into account the nature of quantum reality, actualize its potentials and work through its powers. Saunders gives little attention to questions of primary and secondary causation, traditional doctrines of divine concurrence with created causes, and whether theologians must accept modern conceptions of nature's autonomy.

Second, Saunders's discussion of natural laws is unconvincing. For example, it is not clear why one's interpretation of measurement probabilities

must be the same as one's interpretation of other laws, or why even a regularitarian view must make it meaningless to speak of violations of natural law (understood, in the spirit of Hume, as exceptions to the regular patterns of constant conjunction usually observed?). Paradoxically, Saunders's interpretation of regularitarianism forces it to include blatant irregularities.

Overall, Saunders's conclusion that "non-interventionist quantum SDA is not theoretically possible" (p. 172) seems hasty, but his discussion raises important issues. There are profound questions about the interpretation of quantum mechanics in general and about measurement and wavefunction collapse in the Copenhagen interpretation in particular. Furthermore, it is not clear that quantum measurement events affect macroscopic events in the world in the way that is required. Such scientific issues are in addition to the questions of theodicy and the relation of divine and created causality that arise in connection with any theory of SDA.

Saunders next examines John Polkinghorne's attempts to use chaos theory in a possible account of divine action. It is now widely realized that the equations describing the behavior of weather systems, for example, allow for vanishingly small differences to be rapidly magnified, so that their detailed behavior is impossible to predict in the longer term. Polkinghorne holds that the unpredictability of nature suggests that the world is more supple, flexible, and sensitively interrelated than physical theory can yet capture. Further, chaos theory allows that energy differences between different trajectories can tend to zero, so that God could control trajectories by "active information input" that need not violate the law of conservation of energy. Saunders notes that many critics of Polkinghorne complain that chaos theory involves deterministic equations, while missing the point that Polkinghorne argues that this is just an approximation to a more mysterious, indeterministic reality. Saunders goes on to show, however, that Polkinghorne's account of divine action utilizes aspects of chaos theory that rely on deterministic mathematics: "active information input relies again on the determinism of mathematical chaos to produce the required fractal structure in attractors, the required infinite limit of that structure, and the corresponding region in which energy differences between alternative possible trajectories tends to zero" (p. 194). It might be possible for Polkinghorne to respond that if deterministic chaos theory allows for control without energy input then *a fortiori* indeterministic reality allows for it, but there are certainly serious questions about how far his theory is really supported by chaos theory.

Saunders concludes that the prospects for supporting anything like traditional understandings of divine activity look extremely bleak and that theology is in crisis. As argued above, such a conclusion seems hasty. Science lacks a coherent integration of quantum theory, chaos theory and general relativity, but the present picture still seems more congenial to non-interventionistic SDA than the classical Newtonian one. However, I agree with Saunders that theologians should increase their efforts to put forward scientifically and philosophically informed theories addressing the issues he raises. Overall, while Padgett might reasonably have paid more attention to apparent problems and Saunders might reasonably have not seen them as so serious, both books provide a valuable contribution to this important field.